

WHAT IS CLAIMED IS:

1. A protective sleeve for a bit holder on a cutting tool assembly comprising: a body element including a forward portion adjacent an intermediate portion and a split portion adjacent said intermediate portion, said body element adapted to be receivable in said bit holder.

2. The protective sleeve of claim 1 wherein said split portion extends for less than half the 10 length of said body element.

3. The protective sleeve of claim 1 wherein said forward portion is a collar for protecting the bit holder from axial forces applied a said cutting tool bit.

15 4. The protective sleeve of claim 1 wherein said split portion and said intermediate portion are cylindrical.

5. The protective sleeve of claim 4 wherein 20 said cylindrical intermediate portion and said cylindrical split portion have external surfaces of uniform diameter.

6. A cutter tool assembly for attachment to cutting tool machinery comprising:

a bit holder block having a cavity bore,
25 a protective wear sleeve including a forward portion adjacent an intermediate portion and a split portion adjacent said intermediate portion,
said protective wear sleeve is adapted to be received in said bit holder block.

30 7. The cutter tool assembly of claim 6 wherein said cavity bore is a stepped bore having a

forward portion with a larger diameter and a rearward portion having a smaller diameter.

8. The cutter tool assembly of claim 7 wherein said cavity has a tapered surface between the 5 larger step bore and the smaller step bore.

9. A cutter tool assembly for attachment to cutting tool machinery comprising:

a bit holder having a T-shaped key shank,

10 a support block having a T-shaped groove for receiving said bit holder T-shaped key shank, wherein said support block has symmetric top surfaces flanking said T-shaped groove, said support block having a central vertical axis, said symmetric top 15 surfaces are oriented at an angle with respect to the horizontal plane so as to reduce rotation of the bit holder about said vertical axis.

10. The cutter tool assembly according to claim 9, wherein said angle is at least 10 degrees.

20 11. The cutter tool assembly according to claim 9, wherein said angle is equal to or greater than 15 degrees

12. The cutter tool assembly according to claim 9, wherein said angle is about 15 degrees.

25 13. The cutter tool assembly according to claim 9, wherein said bit holder includes a bore for receiving a shank of a cutting tool bit, said cutting tool bit having a tip end opposite said shank, said bore having a forward end adjacent said tip,

30 wherein said bit holder bore is positioned generally aft of the vertical axis so as to locate the cutting tip closer to the central axis of

the support block limiting the amount of torque applied to said cutter tool assembly during operation.

14. The cutter tool assembly according to claim 13, wherein said portion of said bit holder bore positioned aft of said vertical axis is approximately 75%.

15. A cutter tool assembly for attachment to cutting tool machinery comprising:
10 a bit holder,
 a support block wherein said support has a central vertical axis, said bit holder includes a bore for receiving a shank of a cutting tool bit, said cutting tool bit having a tip end opposite said shank, wherein said bit holder bore is
15 positioned generally aft of the vertical axis so as to locate the cutting tip closer to the central axis of the support block limiting the amount of torque applied to said cutter tool assembly during operation.

16. The cutter tool assembly according to claim 15, wherein said portion of said bit holder bore positioned aft of said vertical axis is approximately 75%.